Measuring **Proficiency** in **Creative Code**

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Introduction

Creative Code (CC): Code as a medium for expression in visual arts [1].

When **expression** is the objective of programming, what does proficiency look like?

Research Objectives

- What are the core skills pertaining to CC?
- What do stages of improvement looks like in CC
- Develop a proficiency metric for CC

Proposed Methodology

- **90 participants** across 4 cohorts of
- Metric developed in **5 stages** over **2 iterations**
- **Delphi method** to gather **expert opinion**[2]
- Items evaluated using **model statistic** and **parameters**

Motivation

- Compare CC interventions and their impact on learning
- evaluate retention of minorities in computing

Item Response Theory [3]

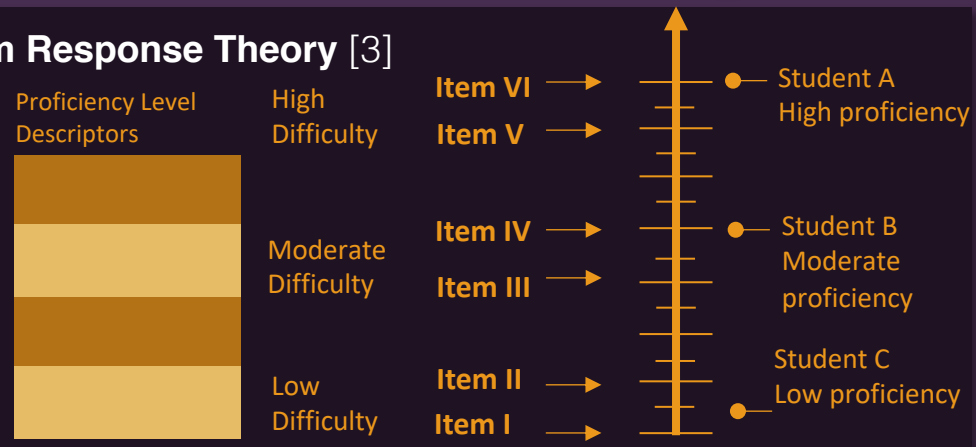

Figure adapted from PISA 2012 Technical report pg289 [4]

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Creative Code interventions, Self-efficacy and retention of minorities in computing

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Notions of proficiency; general, visual arts and computing

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